

Serial No. 09/857,995  
6794F-000037/US/01 (3167/5Z/US)  
Amendment after final action under 37 CFR §1.116 (Amendment D)  
June 17, 2004

## IN THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the present application.

1-3 (cancelled).

4-10 (withdrawn).

11 (cancelled).

12-20 (withdrawn).

21 (cancelled).

22-42 (withdrawn).

43-46 (cancelled).

47-53 (withdrawn).

54 (cancelled).

55-70 (withdrawn).

71 (cancelled).

72-85 (withdrawn).

86-87 (cancelled).

88-106 (withdrawn).

107-108 (cancelled).

109 (withdrawn).

110 (currently amended). ~~The method of claim 1~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an

antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is lung cancer.

111 (currently amended). ~~The method of claim 1~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is colorectal cancer.

112 (currently amended). ~~The method of claim 1~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is breast cancer.

113 (currently amended). ~~The method of claim 1~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is prostate cancer.

114 (currently amended). ~~The method of claim 1~~ A method for treating a

June 17, 2004

neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is bladder cancer.

115 (currently amended). ~~The method of claim 1-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is ovary cancer.

116 (currently amended). ~~The method of claim 1-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is cervical cancer.

117 (currently amended). ~~The method of claim 1-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and

topotecan and a combination thereof, wherein the neoplasia disorder is gastrointestinal cancer.

118 (currently amended). ~~The method of claim 1-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is head and neck cancer.

119 (currently amended). ~~The method of claim 44-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is lung cancer.

120 (currently amended). ~~The method of claim 44-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is colorectal cancer.

121 (currently amended). ~~The method of claim 44-~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method

comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is breast cancer.

122 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is prostate cancer.

123 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is bladder cancer.

124 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is ovary

cancer.

125 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is cervical cancer.

126 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is gastrointestinal cancer.

127 (currently amended). ~~The method of claim 44~~ A method for treating a neoplasia disorder in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and an antineoplastic agent selected from the group consisting of irinotecan and topotecan and a combination thereof, wherein the neoplasia disorder is head and neck cancer.

128 (currently amended). ~~The method of claim 107 wherein~~ A method for treating a neoplasia disorder of the lung in a mammal in need of such treatment, which method comprises administering to said mammal a

June 17, 2004

therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and the antineoplastic agent ~~is~~ irinotecan.

129 (currently amended). ~~The method of claim 108 wherein~~ A method for treating a neoplasia disorder of the lung in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and the antineoplastic agent ~~is~~ irinotecan.

130 (currently amended). ~~The method of claim 107 wherein~~ A method for treating a neoplasia disorder of the lung in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and the antineoplastic agent ~~is~~ topotecan.

131 (currently amended). ~~The method of claim 108 wherein~~ A method for treating a neoplasia disorder of the lung in a mammal in need of such treatment, which method comprises administering to said mammal a therapeutically-effective amount of radiation therapy, the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and the antineoplastic agent ~~is~~ topotecan.

132 (currently amended). ~~The combination of claim 87 wherein~~ A combination comprising the matrix metalloproteinase inhibitor N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide and the antineoplastic agent ~~is~~ irinotecan.

133 (currently amended). ~~The combination of claim 87 wherein~~ A

Serial No. 09/857,995

6794F-000037/US/01 (3167/5Z/US)

Amendment after final action under 37 CFR §1.116 (Amendment D)

June 17, 2004

combination comprising the matrix metalloproteinase inhibitor N-hydroxy-2,2-  
dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide  
and the antineoplastic agent ~~is~~ topotecan.



Serial No. 09/857,995  
6794F-000037/US/01 (3167/5Z/US)  
Amendment after final action under 37 CFR §1.116 (Amendment D)  
June 17, 2004

## REMARKS

Following amendment as requested herein, the following claims are pending in the present application: Claims 110–133. By the present amendment, Claims 1–3, 11, 21, 43–46, 54, 71, 86, 87, 107 and 108 are cancelled without prejudice, in order to focus the present application on particular embodiments of the invention that are the subject of Claims 110–133.

### Amendment of claims

In accordance with the present Office Action (page 5, paragraph 11), each of Claims 110–133 is amended herein to rewrite it in independent form, including all limitations of the original base claim and any intervening claim from which it formerly depended. It is noted that former Claims 1, 44, 87, 107 and 108, from which Claims 110–133 formerly depended, had already been amended to recite the antineoplastic agents of Group I (irinotecan and topotecan) and the specific MMP inhibitor referred to as compound #11, namely N-hydroxy-2,2-dimethyl-4-[[4-(4-pyridinyloxy)phenyl]sulfonyl]-3-thiomorpholinecarboxamide.

Claims 110–133 are not the subject of any rejection in the present Office Action and, as set forth therein at page 5, paragraph 11, “would be allowable if rewritten in independent form”. Applicant believes that by the present amendment, Claims 110–133 have indeed been rewritten exactly as suggested in the Office Action and are therefore now allowable.

No new matter is introduced by the present amendment. No changes in inventorship result from the present amendment.

### Claim rejections under 35 USC §103(a)

Claims 1, 43, 44, 86, 87, 107 and 108 stand rejected under 35 USC §103(a) as being unpatentable over Zook *et al.* in view of Anderson *et al.* This rejection is now moot in view of cancellation of the rejected claims.

### Claim rejections under 35 USC §112, first paragraph

Claims 1, 43, 44 and 86 stand rejected under 35 USC §112, first paragraph as lacking enablement for the term “neoplasia disorder” as broadly defined in the specification. This rejection is now moot in view of cancellation of the rejected claims.

Serial No. 09/857,995

6794F-000037/US/01 (3167/5Z/US)

Amendment after final action under 37 CFR §1.116 (Amendment D)

June 17, 2004

Claim objections

Claims 2, 3, 11, 21, 45, 46, 54 and 71 are objected to for certain informalities. These objections are now moot in view of cancellation of the objected-to claims.

Telephone call on June 10, 2004

Applicant appreciates the Examiner's courtesy in discussing a proposed response by Applicant to the present Office Action, during a telephone call with the undersigned on June 10, 2004. The undersigned sought clarification from the Examiner as to whether proposed amended claim sets 110-118 and 119-127 could be condensed into a single claim for each set, reciting a Markush group of specific cancers. Based on that discussion, Applicant has elected not to condense the claims in this manner but instead to proceed exactly as suggested by the Examiner in the present Office Action at page 5, paragraph 11.

Immediately following the telephone call, Applicant transmitted by fax to the Examiner's attention a new Power of Attorney naming the undersigned.

Entry of the present amendment is requested in view of the remarks above. Applicant believes the application is now in condition for allowance. Should any issues remain, the Examiner is invited to call the undersigned at the telephone number given below.

Respectfully submitted,

HARNES, DICKEY & PIERCE, P.L.C.



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Attachments

Fee transmittal form

Check to cover excess claim fees

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